

=> d his

(FILE 'HOME' ENTERED AT 10:03:13 ON 25 FEB 2004)

FILE 'CASREACT' ENTERED AT 10:03:23 ON 25 FEB 2004

L1 STRUCTURE UPLOADED

L2 0 S L1

L3 0 S L1 FULL

FILE 'REGISTRY' ENTERED AT 10:04:22 ON 25 FEB 2004

E 3,4-DIAMINO BENZENESULPHONIC ACID/CN

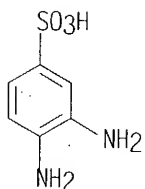
L4 1 S E2

E 1,2-DIAMINO BENZENE/CN

L5 1 S E3

=> d 14

L4 ANSWER 1 OF 1 REGISTRY COPYRIGHT 2004 ACS on STN
RN 7474-78-4 REGISTRY
CN Benzenesulfonic acid, 3,4-diamino- (8CI, 9CI) (CA INDEX NAME)
OTHER NAMES:
CN 3,4-Diaminobenzenesulfonic acid
CN NSC 401086
FS 3D CONCORD
MF C6 H8 N2 O3 S
CI COM
LC STN Files: BEILSTEIN*, CA, CAPLUS, CASREACT, CHEMCATS, CHEMLIST,
GMELIN*, HODOC*, IFICDB, IFIPAT, IFIUDB, TOXCENTER, USPATFULL
(*File contains numerically searchable property data)
Other Sources: EINECS**, NDSL**, TSCA**
(**Enter CHEMLIST File for up-to-date regulatory information)



PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

21 REFERENCES IN FILE CA (1907 TO DATE)
2 REFERENCES TO NON-SPECIFIC DERIVATIVES IN FILE CA
21 REFERENCES IN FILE CAPLUS (1907 TO DATE)

10/663,827

Page 3

=> d 15

L5 ANSWER 1 OF 1 REGISTRY COPYRIGHT 2004 ACS on STN

RN 95-54-5 REGISTRY

CN 1,2-Benzenediamine (9CI) (CA INDEX NAME)

OTHER CA INDEX NAMES:

CN o-Phenylenediamine (8CI)

OTHER NAMES:

CN 1,2-Diaminobenzene

CN 1,2-Phenylenediamine

CN 2-Aminoaniline

CN C.I. 76010

CN C.I. Oxidation Base 16

CN IK 3

CN IK 3 (amine)

CN NSC 5354

CN o-Aminoaniline

CN o-Aminophenylamine

CN o-Benzenediamine

CN o-Diaminobenzene

CN Orthamine

FS 3D CONCORD

MF C6 H8 N2

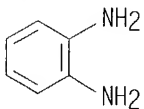
CI COM

LC STN Files: AGRICOLA, ANABSTR, AQUIRE, BEILSTEIN*, BIOBUSINESS, BIOSIS, BIOTECHNO, CA, CANCERLIT, CAOLD, CAPLUS, CASREACT, CHEMCATS, CHEMINFORMRX, CHEMLIST, CHEMSAFE, CIN, CSCHEM, CSNB, DETHERM*, DIPPR*, EMBASE, GMELIN*, HODOC*, HSDB*, IFICDB, IFIPAT, IFIUDB, MEDLINE, MRCK*, MSDS-OHS, NIOSHTIC, PIRA, PROMT, RTECS*, SPECINFO, SYNTHLINE, TOXCENTER, ULIDAT, USPAT2, USPATFULL

(*File contains numerically searchable property data)

Other Sources: DSL**, EINECS**, TSCA**

(**Enter CHEMLIST File for up-to-date regulatory information)



PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

8240 REFERENCES IN FILE CA (1907 TO DATE)

243 REFERENCES TO NON-SPECIFIC DERIVATIVES IN FILE CA

8259 REFERENCES IN FILE CAPLUS (1907 TO DATE)

4 REFERENCES IN FILE CAOLD (PRIOR TO 1967)

=> fil casreact

FILE 'CASREACT' ENTERED AT 10:07:28 ON 25 FEB 2004

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FILE CONTENT:1840 - 22 Feb 2004 VOL 140 ISS 8

Some records from 1974 to 1991 are derived from the ZIC/VINITI data file and provided by InfoChem and some records are produced using some INPI data from the period prior to 1986.

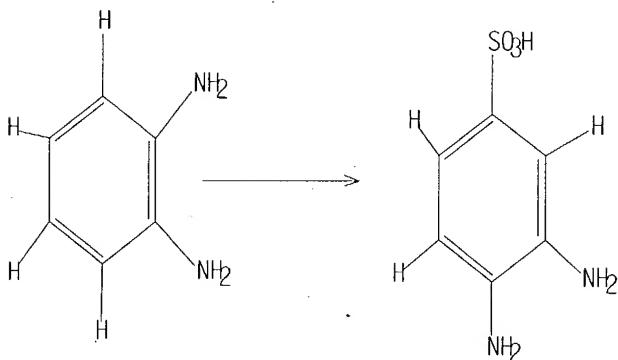
This file contains CAS Registry Numbers for easy and accurate substance identification.

Crossover limits have been increased. See HELP RNCROSSOVER for details.

Structure search limits have been raised. See HELP SLIMIT for the new, higher limits.

=> d que 13 stat

L1 STR



Structure attributes must be viewed using STN Express query preparation.

L3 0 SEA FILE=CASREACT SSS FUL L1 (0 REACTIONS)

100.0% DONE

46 VERIFIED

0 HIT RXNS

0 DOCS

SEARCH TIME: 00.00.01

=> fil capl

FILE 'CAPLUS' ENTERED AT 10:07:46 ON 25 FEB 2004

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FILE COVERS 1907 - 25 Feb 2004 VOL 140 ISS 9
FILE LAST UPDATED: 24 Feb 2004 (20040224/ED)

This file contains CAS Registry Numbers for easy and accurate substance identification.

'FIONA' IS DEFAULT FORMAT FOR 'CAPLUS' FILE

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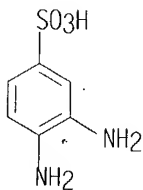
L6 2 L4/P

=> s 16 and 15

8261 L5
L7 0 L6 AND L5

=> d 16 1-2 bib abs hitstr

- L6 ANSWER 1 OF 2 CAPLUS COPYRIGHT 2004 ACS on STN
AN 1990:630894 CAPLUS
DN 113:230894
TI The formation and stability of 3,4-diaminobenzenesulfonic acid-iron(III) complex
AU Yuksel, Gonul; Pekin, Mursit; Dolen, Emre
CS Dep. Pharm. Chem., Marmara Univ., Nisantasi, Turk.
SO Marmara Universitesi Eczacilik Dergisi (1989), 5(1), 19-30
CODEN: MUEDEZ; ISSN: 1011-3398
DT Journal
LA Turkish
AB Formation of the red-brown ($\lambda = 450$ nm) complex from 3,4-diaminobenzenesulfonic acid (DAB) and iron (III) was studied and the stability constant determined spectrophotometrically. The acid constant of the ligand was determined potentiometrically as $pK_a = 3.413 \pm 0.201$ at 20° . By using Job's method of continuous variation, the composition of complex was found to be $Fe(III)/DAB = 3/2$ at pH 4.00. Two inflection points were observed for $Fe(III)/DAB = 1/2$ and $3/2$ from the mol ratio curve. When iron(III) was determined in the solution prepared with a $Fe(III)/DAB$ mol ratio equal to $3/2$ titrated by standard EDTA solution, only one-third of total iron was at iron(III) oxidation state. Thus, two-thirds of the total iron oxidizes the equivalent amount of DAB to monoimino state and the remaining one-third of total iron forms a complex with two monoimine mols. The formula of the soluble complex may be $[Fe(DAB)_2(H_2O)_2]^+$. The formation consts. of complex were determined by the ligand excess method or the equal absorptive solns. method. The free energy change in the formation of complex is $\Delta G = -41.86$ kJ mol⁻¹.
IT 7474-78-4DP, 3,4-Diaminobenzenesulfonic acid, iron complexes
RL: PRP (Properties); PREP (Preparation)
(formation and stability constant of)
RN 7474-78-4 CAPLUS
CN Benzenesulfonic acid, 3,4-diamino- (8CI, 9CI) (CA INDEX NAME)



L6 ANSWER 2 OF 2 CAPLUS COPYRIGHT 2004 ACS on STN
AN 1990:611478 CAPLUS
DN 113:211478
TI The formation and stability of 3,4-diaminobenzenesulfonic acid nickel(II) and manganese(II) complexes
AU Saygin, Erki; Pekin, Mursit; Dolen, Emre
CS Dep. Anal. Chem., Marmara Univ., Nisantasi, Turk.
SO Marmara Universitesi Eczacilik Dergisi (1989), 5(1), 53-63
CODEN: MUEDEZ; ISSN: 1011-3398
DT Journal
LA Turkish
AB The stability consts. of the complexes which were formed from 3,4-diaminobenzenesulfonic acid (DAB) with nickel(II) and manganese(II) were determined potentiometrically. The protonation consts. of DAB were $\log \beta_1 = 3.6$ and $\log \beta_2 = 4.0$ at 20° and $I = 0.1$. According to the formation curves and the number of the stability consts. the composition of complexes was metal/DAB = 1/2. The stability consts. of complexes were $\log \beta_1 = 2.75$ and $\log \beta_2 = 5.35$ for nickel(II) complex and $\log \beta_1 = 3.65$ and $\log \beta_2 = 6.89$ for manganese(II) complex at 20° and $I = 0.1$. The conditional formation consts. and the formation pH ranges of complexes were $\log K' = 5.30$ and $\text{pH} = 0-12$ for nickel(II) complex and $\log K' = 6.87$ and $\text{pH} = 0-14$ for manganese(II) complex.
IT 7474-78-4DP. 3,4-Diaminobenzenesulfonic acid, nickel and manganese complexes
RL: PRP (Properties); PREP (Preparation)
(formation and stability consts. of)
RN 7474-78-4 CAPLUS
CN Benzenesulfonic acid, 3,4-diamino- (8CI, 9CI) (CA INDEX NAME)

